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THE ILLINOIS ECONOMY: A
MICROCOSM OF THE UNITED
STATES?

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THE INSTITUTE OF GOVERNMENT AND PUBLIC AFFAIRS

THE ILLINOIS ECONOMY: A Microcosm of the United States?

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with Hugh T. Connelly

UNIVERSITY OF ILLINOIS

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OF THE UNITED STATES?

by

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Both agriculture and industry are of fundamental importance. Geographically the State belongs neither to the North, South, East, nor West, but at a peculiar focal point of all four. The visual evidence of this is frequently missed by through-State motorists because a large portion of transcontinental traffic traverses only the Corn Belt. Even there the fusion of the industrial East and the agricultural West occasionally occurs where farmers' fields extend almost into the shadows of mine tipples and industrial plants. In latitude the agricultural economy shifts from Northern dairying through Midwestern corn-raising to Southern fruit-farming and cotton-growing. And at the lower tip of the State the heat of the South seeps up the Mississippi, ripening the crops a month earlier than elsewhere and slowing down the pace of human activity. . . . Criss-crossed by railroads from all corners of the country, a steel-maker as well as a wheat-stacker, Illinois in its entirety functions as a working model of the Nation as a whole. Therein the heterogeneity of the State takes on meaning and becomes in itself a symbol burdened with deep significance.

Federal Writer's Project
Illinois: A Descriptive and
Historical Guide

It has already become clear that Illinois. . . is one of the most heterogeneous states in the Union. In its social structure and its patterns of political response it is very likely the nation's most representative state. In the heart of the Middle West (as traditionally defined), it stands at the geohistorical center of the United States. While its physiographic personality is relatively undistinguished, it combines within its boundaries most of the social, economic, historic, and geographic diversities found in this country.

Daniel J. Elazar
Cities of the Prairie

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THE ILLINOIS ECONOMY: A MICROCOSM
OF THE UNITED STATES?

As one of the major industrial states, Illinois is situated at the cross currents of economic activity in the United States. Other writers have sensed that much of what is basic to the national economy is also integral to the Illinois economy. Here we examine to what extent the state's economy can be characterized as a "microcosm"--representation in miniature or on a small scale--of the U.S.¹

It is at least conceivable that one state might have an economic structure so closely parallel to the complex national economy that one could identify the state as a microcosm. Such an identification could produce several distinct benefits. Frequently social scientists and federal policymakers want to study and understand social phenomena under "manageable" circumstances. Researchers turn to stratified samples and selected case studies in efforts to comprehend the national economy. The microcosm state, or select elements of that state's economy, could serve either as a bellweather or a control in observations and social experiments leading to national policy.

The search to determine whether Illinois is such a microcosm state can be likened to the experience of flying an airplane over the countryside to photograph the terrain. Looking out the window, one observes general patterns on the ground below. One can discern factories, farms, and cities. More subtle differences between structures or activities become apparent as one flies closer to the ground. Later, photographs of what one has seen can be studied for comparison. But photographs "freeze" time, and we live in a world of change. In themselves, photographs of two cities taken the same day may tell us little

about the dynamics of change that will affect the future course of each city.

Similarly, we must be cautious about the limitations and implications of a study to determine whether the Illinois economy is a microcosm of the U.S. economy. We begin our analysis with broad comparisons of general characteristics of the population, the labor force, agriculture, commerce, and industry. As our analysis becomes more detailed and specific, we would anticipate that differences between the economies of Illinois and the U.S. will emerge. In this respect we are surprised in many cases; a striking similarity in the relative weights of several basic economic sectors is reinforced as we subdivide these sectors and the labor force and find more specific details.

Nevertheless, setting columns of data for Illinois and the U.S. side by side and evaluating the differences runs the same risks and limitations as does comparing the photographs of two cities. The economic tables are records of a specific period of time, still photographs of a very dynamic process. Although one may identify striking similarities between the relative structure of a state economy and that of the entire U.S., the patterns of change may be such that crucial elements of the two economies are moving at different rates or directions over time. For these reasons the reader should look to his specific needs or curiosities in the pages that follow, rather than anticipate that it is possible to identify a microcosm of the U.S. economy that is representative and applicable in all relevant aspects.

THE ILLINOIS ECONOMY--FRAMEWORK FOR ANALYSIS

Among the fifty states, the economic activity of Illinois generates a disproportionately large percentage of the gross national product. Illinois ranks fifth among the states in population, fifth in per capita income, fourth in manufacturing value-added,² and fourth in value of state agricultural product. Certainly Illinois is not representative among the states, but this is not the issue as posed. Rather, is Illinois representative of the composite of the entire country? In this more global sense, the magnitude of the Illinois economy or that of another large state may be necessary to generate the diverse output that might be representative of the U.S. as a whole.

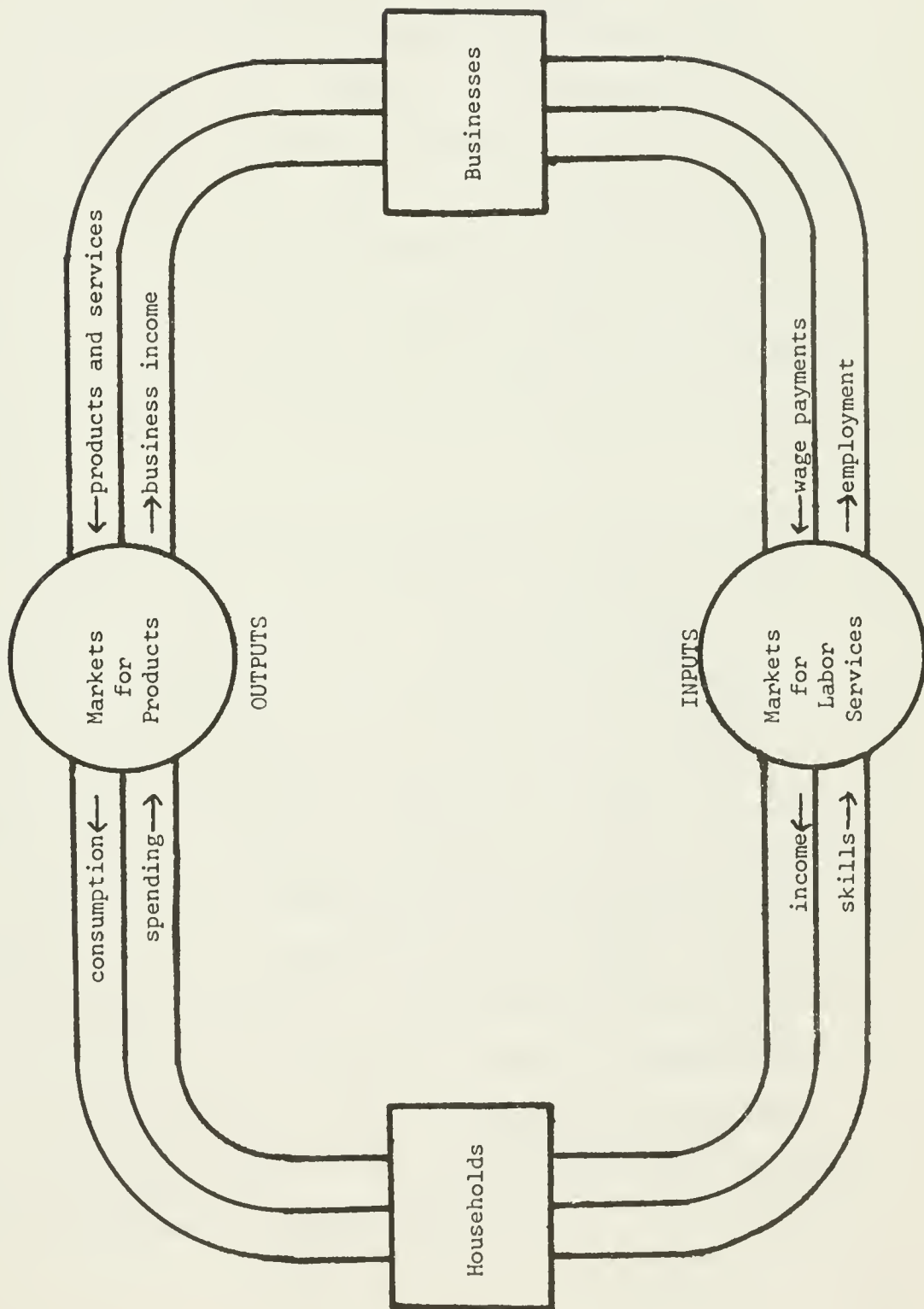
Geography is an important factor which shapes the nature and magnitude of economic activity in a state. One measure of central tendency is the location of the population center of the U.S., which since the late 1940s has been in Illinois. Now that constructed center is shifting somewhat south and west into Missouri, but Illinois continues to be the crossroads of a nationwide transportation network. Although it ranks only twenty-fourth among the fifty states in absolute size, Illinois is a "long" state. Its southernmost counties are on the same latitude as Richmond, Virginia. Indeed, the area that is now Illinois once was an outer county in the commonwealth of Virginia. Chicago is located 376 miles north of Cairo, the southernmost Illinois community. Chicago is close in latitude to Cleveland, Ohio; Hartford, Connecticut; and Providence, Rhode Island. These north-and-south comparisons are more than

casual observations. In many senses the cultural and political attitudes within the state reflect the national historic distinctions between north and south.

Given the diversity and complexity of Illinois, how can one analyze the economies of the state and the country so that meaningful comparisons can be made? In a market-dominated society, one convenient framework is the "circular flow" abstraction of economic activity. The essence of economics is the production and distribution of goods and services, and something is never created out of nothing. Inputs such as labor effort, land, and capital equipment are necessary to produce economic output. In our complex, specialized economy, households contract to sell their labor or rent their land in order to earn purchasing power for the consumption of goods and services produced by others. One representation of the circular flow is illustrated in Diagram 1.

Diagram 1

The Circular Flow of Production and Distribution in the Private Sector



Producers and producing firms offer to pay wages or rents in order to accumulate the skills, labor effort, and machinery that, when coordinated, will generate marketable goods and services. The output is then offered in the marketplace for sale either to other producers or to consumers. When coupled with capital equipment, labor energy transforms raw material into finished products and services. An inventory of inputs--such as farm proprietor employment, electrician employment, and machinist employment--will differ from an accounting of outputs--such as hogs, heavy construction equipment, and timber and wood products.

Diagram 1 shows the more important elements of this productive process. We "cut into" the circle at point 1 by analyzing the labor force as a crucial input in production. A descriptive analysis of basic economic characteristics of the Illinois labor force provides a survey sketch of the productive potential in Illinois. Patterns of actual employment by major economic sectors and by industry are then the basis for comparing the Illinois work force with that of the aggregate U.S. The incidence of unemployment--the difference between labor force potential and actual employment--will also be noted. Once we appreciate parallels and differences in inputs between Illinois and the U.S., we then can focus our attention on the nature of production and the kinds and relative weights of various kinds of goods and service outputs produced. The framework of the circular flow assures us a complete picture of comparative economic activity.

A word of caution is necessary in regard to comparing differences in magnitudes in statistical series. One should be wary of tendencies to make mountains out of molehills, in either apparent similarities or apparent differences between the economies of Illinois and the entire U.S. For example, in Illinois 2.7 percent of the civilian labor force is engaged in agriculture. The comparable figure is 3.7 percent for the entire U.S., almost 40 percent greater than Illinois as a percentage of the labor force. Does this significant difference in the size of the agricultural employment sector mean that the Illinois economy is not representative of the aggregate U.S.?

We use the concept of "range" to place these absolute differences in perspective.³ Where comparable data are available for all fifty states, we give the range in values among the fifty states for that specific economic variable. In the example used above, the civilian labor force employed in agriculture varies among the fifty states from a low of 0.9 percent to a high of 22.2 percent. In this specific measure of labor force composition, Illinois, with 2.7 percent employed in agriculture, stands close to the median state. At this point it is a matter of personal judgement whether the 2.7 percent Illinois value is comparable to the 3.7 percent value for the entire U.S.

INPUTS: THE LABOR FORCE

Demographic Characteristics

Labor effort, capital, and natural resources are the three general categories of inputs into the productive process. The population base of

Table 1

SOCIAL CHARACTERISTICS OF THE POPULATION, 1970

			U.S.: 50 States			Illinois minus U.S./50-State Range
	Illinois	U.S.	Low	High	Range	
Migration:						
Native population--percent residing in state of birth	71.6	68.0	23.6	83.0	59.4	3.6/59.4
Persons age 5 and over-- percent migrant	12.6	17.1	10.4	41.1	30.7	-4.5/30.7
Education:						
Persons ages 4-17--percent enrolled in school	93.7	92.7	86.7	95.5	8.8	1.0/ 8.8
Persons age 25 and over: Median school years com- pleted	12.1	12.1	9.9	12.5	2.6	0.0/ 2.6
Percent completing 4 years of high school or more	52.6	52.3	37.8	67.3	29.5	0.3/29.5
Persons ages 14-34--percent enrolled in school:						
Ages 14-15	96.9	95.9	92.3	98.0	5.7	1.0/ 5.7
16-17	90.3	89.3	81.7	95.1	13.4	1.0/13.4
18-19	56.6	56.6	39.0	68.3	29.3	0.0/29.3
20-21	32.2	30.7	9.7	43.3	33.6	1.5/33.6
22-24	15.0	14.6	6.8	32.9	26.1	0.4/26.1
25-34	6.0	6.1	3.1	12.6	9.5	-0.1/ 9.5
Median school years completed:						
Females age 25 and over:						
Total females:	12.1	12.1	10.3	12.4	2.1	0.0/ 2.1
White	12.1	12.1	10.3	12.6	2.3	0.0/ 2.3
Black	10.8	10.0	8.1	12.7	4.6	0.8/ 4.6
Males age 25 and over:						
Total males:	12.1	12.1	9.5	12.6	3.1	0.0/ 3.1
White	12.2	12.1	9.6	12.7	3.1	0.1/ 3.1
Black	10.5	9.4	6.5	12.6	6.1	1.1/ 6.1
Geographic distribution:						
Percent urban residents	83.0	73.5	32.2	90.9	58.7	9.5/58.7
Percent rural nonfarm residents	12.5	21.3	7.9	59.8	51.9	-8.8/51.9
Percent rural farm residents	4.5	5.2	0.8	25.2	24.4	-0.7/24.4

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Volume 1, Characteristics of the Population, Part 1--United States, and Part 15--Illinois (Washington: Government Printing Office), Chapter B, "General Population Characteristics"; Chapter C, "General Social and Economic Characteristics"; Chapter D, "Detailed Characteristics."



a state forms the labor pool from which the civilian labor force emerges. Do the relevant population characteristics of Illinois residents reflect those of the U.S. as a whole? Table 1 presents data on these characteristics.

One important point must be made: the city of Chicago and the Chicago standard metropolitan statistical area (SMSA) dominate statistics on the Illinois economy. Consequent Illinois state averages reflect the bias of this dominant metropolitan complex. For example, although Illinois's black population of 12.8 percent is not significantly different from the 11.1 percent U.S. average, 98.4 percent of Illinois's blacks are urban residents--as opposed to the overall U.S. figure of 71.7 percent (see Table 2). Illinois is more urban with 83.0 percent of its population in urban residence, than is the U.S. as a whole, with a comparable figure of 73.5 percent. In urban concentration, however, Illinois is close to the median among the fifty states.

Table 2

RURAL-URBAN DISTRIBUTION OF POPULATION BY RACE, 1970

	U.S.	Illinois
Black population:		
Percent urban residents	71.7	98.4
Percent rural nonfarm residents	13.9	1.4
Percent rural farm residents	26.4	0.2
White population:		
Percent urban residents	72.5	81.4
Percent rural nonfarm residents	22.0	14.1
Percent rural farm residents	5.5	5.1

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Volume 1, Characteristics of the Population, loc. cit.

Even the relative weight of the Chicago metropolitan area does not significantly alter the similarity of the social characteristics of Illinois's population to those of the U.S. at-large. In the 1970 census data on education aspects of the population, for example, Illinois exhibits a remarkable consistency with national averages. In fact, some differences that do exist reinforce the tendency of the Illinois economic base to be representative of the U.S. Thus, although Illinois is less of a state of migrants than is the average among all states, this factor adds an element of stability to the state as a microcosm of the U.S. Another difference is the distorting effect of Chicago on statewide geographic population distribution, and yet Chicago's economic base is one of the major factors contributing to the diversification necessary for Illinois to be representative of the national economy.

Looking at state and national labor force participation as illustrated in Table 3, we again note how closely Illinois's figures represent those of the U.S. at-large. Illinois does differ in one measure of labor force participation: the unemployment rate. In recent years the Chicago metropolitan area and the state as a whole have been below over-all national unemployment rates. During the 1969-71 recession the U.S. unemployment rate rose to 5.9 percent for the 1971 year, while the Chicago SMSA unemployment rate was 4.3 percent for that year. In 1971 the statewide unemployment rate was 4.7 percent.⁴

Table 3

LABOR FORCE PARTICIPATION, 1970

	Illinois	U.S.	U.S.: 50 States			Illinois minus U.S./50-State Range
			Low	High	Range	
Employment status by sex:						
Males age 16 and over:						
Percent in labor force	78.9	76.6	66.9	84.8	17.9	2.3/17.9
Unemployed as percent of labor force	3.3	3.9	2.2	10.2	8.0	-0.6/ 8.0
Females age 16 and over:						
Percent in labor force	43.3	41.4	29.4	49.0	19.6	1.9/19.6
Unemployed as percent of labor force	4.5	5.2	3.6	8.7	5.1	-0.7/ 5.1
Percent females in labor force by marital status and presence of own children:						
All females age 17 and over:						
With own children under age 6	29.2	30.8	19.8	45.4	25.6	-1.6/25.6
With own children ages 6-17	50.7	50.1	35.4	59.7	24.3	0.6/24.3
With no children under age 18	45.2	41.7	30.2	52.9	22.7	3.5/22.7
Married females age 16 and over, husband present:						
With own children under age 6	26.5	28.2	17.9	43.6	25.7	-1.7/25.7
With own children ages 6-17	47.6	47.1	33.1	58.6	25.5	0.5/25.5
With no children under age 18	43.1	41.0	29.5	55.2	25.7	2.1/25.7
Nonworker to worker ratio	1.37	1.45	1.2	1.98	.77	-.08/ 0.77
Percent unemployed, civilian labor force	3.7	4.4	3.0	9.2	6.2	-0.7/ 6.2
Employment status by sex and residence, percent in labor force:						
Males age 16 and over:						
urban residents	79.5	77.6	70.0	90.4	20.4	1.9/20.4
rural nonfarm residents	79.1	76.5	58.6	84.6	26.0	2.6/26.0
rural farm residents	74.7	73.2	64.5	84.9	20.4	1.5/20.4
Females age 16 and over:						
urban residents	44.7	43.1	36.4	51.4	15.0	1.6/15.0
rural nonfarm residents	30.5	31.6	17.3	48.4	31.1	-1.1/31.1
rural farm residents	38.0	37.0	24.5	46.4	21.9	1.0/21.9

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Volume 1, Characteristics of the Population, loc. cit.

The present recession began about January 1974, when monthly national unemployment rates rose from 4.8 to 5.2 percent and continued a steady climb to a thirty-five year high of 9.2 percent in May 1975.⁵ In that month the statewide unemployment rate was 7.7 percent, and the Chicago metropolitan area unemployment rate was recorded at 8.0 percent.⁶ Although national unemployment rates declined for the subsequent four months, Illinois unemployment rates continued to rise. In October 1975 the U.S. unemployment rates again increased, to 8.5 percent. In that month the Illinois unemployment rate was higher, at 9.9 percent, as was the rate for the Chicago SMSA, at 10.2 percent.⁷ The relationship between unemployment rates in Illinois and in the U.S. at-large therefore is not as stable as are other considerations of labor force participation, although over the last twenty years Illinois has usually had statewide unemployment rates lower than comparable rates for the entire U.S.

The diverse nature of Chicago's industrial complex explains in some measure why the state labor force is less susceptible to the shocks and whims of select industrial goods markets than are the labor forces in states with production concentrated in a few industries. Another feature that makes Illinois's labor force more representative of the entire nation is that Chicago is less intensively unionized than are comparable north-central and western industrial cities such as San Francisco, Detroit, Milwaukee, Pittsburgh, and Toledo. With from 70 to 74 percent of industrial and office workers covered by labor-management contracts,

Chicago stands at about the national median for large industrial cities. Peoria and Rockford, which have smaller percentages of unionized workers, are more representative of smaller industrial cities nationwide.

When the labor force is divided into broad categories of (1) wage and salary employees, (2) self-employed, and (3) government employees, Illinois is close to the national average in the first two categories. In regard to the third category, however, Illinois, with 3.0 percent of its labor force employed within the state by the federal government, is below the average among the fifty states. The national average is 4.6 percent, with a range from 2.0 percent to 17.1 percent. Illinois does have many federal facilities, and 134,000 Illinois residents are federal employees. But again the large, diverse state economy explains the relative differences.

Labor Force Distribution

The distribution of the labor force by occupation again reinforces our observation that the Illinois workers as a group are representative of the U.S. (see Table 4). Absolute differences on Table 4 are minimal when one relates Illinois to the range in values among the other states. In no case is Illinois at the extreme. Illinois does have fewer relative numbers of farm laborers and farm foremen than does the average among the states. This reflects the unit-size highly productive family farm and sharecrop agricultural structure in the state. The higher percentage of clerical workers in Illinois than in the U.S. reflects concentrations of retail and wholesale regional trade centers as well as the presence of the national headquarters of many corporations, banks, and insurance companies.

Table 4

PERCENTAGE LABOR FORCE DISTRIBUTION BY OCCUPATION, 1970

Employed Persons Age 16 and Over	Illinois	U.S.	U.S.: 50 States			Illinois minus U.S./50-State Range
			Low	High	Range	
Professional, technical and kindred workers	14.2	14.8	10.8	19.5	8.7	-0.6/ 8.7
Administrators and man- agers, except farm	7.5	8.3	7.0	11.5	4.5	-0.8/ 4.5
Sales workers	7.2	7.1	5.4	8.7	3.3	0.1/ 3.3
Clerical and kindred workers	20.2	18.0	12.5	22.4	9.9	2.2/ 9.9
Craftsmen, foremen, and kindred workers	13.9	13.9	9.6	17.4	7.8	0.0/ 7.8
Operatives, except transportation	14.4	13.7	4.7	22.5	17.8	0.7/17.8
Transportation equip- ment operatives	4.0	3.9	2.9	5.4	2.5	0.1/ 2.5
Laborers, except farm	4.3	4.5	2.9	6.2	3.3	-0.2/ 3.3
Farm laborers and foremen	0.6	1.2	0.2	4.4	4.2	-0.6/ 4.2
Service workers, except private household	11.0	11.3	8.6	23.9	15.3	-0.3/15.3
Private household workers	0.8	1.5	0.7	4.1	3.4	-0.7/ 3.4
Farmers and farm managers	1.8	1.9	0.2	17.2	17.0	-0.1/17.0

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Volume 1, Characteristics of the Population, loc. cit.

As we stated in our introductory remarks, it was reasonable to assume that subtle differences between the Illinois economy and that of the nation would become more apparent and distinct as we move from general impressions to greater detail. This is strictly not the case as we further divide the labor force by industry distribution. Table 5 shows this facet of the state's diverse economy. The figures in this table leave no doubt that Illinois is a manufacturing state, but worker representation in

Table 5

PERCENTAGE INDUSTRIAL DISTRIBUTION OF EMPLOYED PERSONS, 1970

Persons Age 16 and Over	Illinois	U.S.	U.S.: 50 States			Illinois minus U.S./50-State Range
			Low	High	Range	
Agriculture	2.7	3.7	0.9	22.2	21.3	-1.0/21.3
Mining	0.5	0.8	0.1	9.0	8.9	-0.3/ 8.9
Construction	5.1	6.0	4.8	9.4	4.6	-0.9/ 4.6
Manufacturing	30.3	25.9	4.7	36.2	31.5	4.4/31.5
Railroads and Railway Express	1.3	0.8	0.0	2.8	2.8	0.5/ 2.8
Trucking and warehousing	1.7	1.4	0.9	1.9	1.0	0.3/ 1.0
Other transport	1.4	1.4	0.6	5.3	4.7	0.0/ 4.7
Communications	1.3	1.4	1.0	2.0	1.0	-0.1/ 1.0
Utilities and sanitation	1.6	1.7	1.1	2.5	1.4	-0.1/ 1.4
Wholesale trade	5.0	4.1	2.6	5.2	2.6	0.9/ 2.6
Retail trade	16.1	15.9				
Food, bakery, and dairy	2.5	2.5	2.0	2.9	0.9	0.0/ 0.9
Eating, drinking places	3.0	3.0	1.9	4.7	2.8	0.0/ 2.8
General merchandise retailing	3.2	2.7	1.9	3.2	1.3	0.5/ 1.3
Motor vehicle retailing and service stations	1.8	2.2	1.3	3.5	2.0	-0.4/ 2.0
Other retail trade	5.6	5.5	4.8	6.9	2.1	0.1/ 2.1
Banking, credit, and other finance	1.8	1.7	1.2	2.4	1.2	0.1/ 1.2
Insurance and real estate	3.5	3.3	1.6	5.1	3.5	0.2/ 3.5
Business services	1.9	1.7	0.6	3.6	3.0	0.2/ 3.0
Repair services	1.3	1.4	1.1	2.1	1.0	-0.1/ 1.0
Private household	0.8	1.5	0.7	4.1	3.4	-0.7/ 3.4
Other personal services	2.9	3.1	2.1	16.2	14.1	-0.2/14.1
Entertainment and recreation	0.7	0.8	0.4	7.6	7.2	-0.1/ 7.2
Hospitals	3.5	3.5	2.4	4.9	2.5	0.0/ 2.5
Health services, except hospitals	1.7	2.0	1.5	2.7	1.2	-0.3/ 1.2
Elementary and secondary schools and colleges	6.9	7.6	5.9	11.0	5.1	-0.7/ 5.1
Other education and kindred services	0.4	0.4	0.3	0.8	0.5	0.0/ 0.5
Welfare, religious, and nonprofit membership organizations	1.4	1.5	1.0	2.0	1.0	-0.1/ 1.0
Legal, engineering, and miscellaneous professional services	2.6	2.6	1.6	3.9	2.3	0.0/ 2.3
Public administration	4.4	5.5	3.5	16.4	12.9	-1.1/12.9

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Volume 1, Characteristics of the Population, loc. cit.

all other industries is comparable with the U.S. as a whole. The range in relative worker distribution by industry among the fifty states is one indicator of the degree of economic specialization in many other states.

Income and Poverty Status

Personal income as a return for effort is the complement to data on employment and other productive inputs. At the top quintile among the fifty states, the average family income in Illinois is not representative of the U.S. Rather, the Illinois figures are close to those of other large industrial states. Illinois's per capita personal income of \$6,234 in 1974 is 14.4 percent greater than the overall U.S. average of \$5,448 for that year.⁸ Given that average income in Illinois is greater than that of the entire U.S., the U.S. Bureau of the Census estimates that the distribution of income about these averages is quite comparable between Illinois and the nation as a whole.⁹

Poverty is an important detail in income distribution. The 1970 census provides the most detailed reporting on poverty in Illinois and the U.S. (see Table 6). Federal agencies continue to estimate annual changes in the incidence of poverty for the nation as a whole, but data subsequent to the 1970 census are not available on a state-by-state basis. Therefore, the impact on poverty households in Illinois of the two sharp recessions since 1970 is not yet known.

Table 6

POVERTY STATUS OF PERSONS AND FAMILIES, 1970

	Illinois	U.S.	U.S.: 50 States			Illinois minus U.S./50-State Range
			Low	High	Range	
Percent families receiving						
public assistance	3.9	5.3	2.4	11.1	8.7	-1.4/ 8.7
Mean size of family	3.56	3.56	3.33	3.98	0.65	0.0/ 0.65
Family heads over age 65						
as percent total families	13.2	13.8	3.5	18.0	14.5	0.6/14.5
Percent families with income						
below poverty level	7.7	10.7	5.3	28.9	23.6	-3.0/23.6
Percent receiving public						
assistance	23.1	21.5	9.6	29.6	20.0	1.6/20.0
Percent with family heads						
over age 65	24.8	24.7	7.8	32.5	24.7	0.1/24.7
Mean size of family	3.79	3.88	3.46	4.82	1.36	-0.09/1.36
Percent persons receiving						
Social Security	9.5	9.9	2.1	14.9	12.8	-0.4/12.8
Percent persons with income						
below poverty level	10.2	13.7	7.2	35.4	28.2	-3.5/28.2
Percent receiving Social						
Security	21.7	19.0	4.6	28.2	23.6	2.7/23.6
Percent below poverty						
level, age 65 and over	22.4	19.2	4.5	29.0	24.5	3.2/24.5

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Volume 1, Characteristics of the Population, loc. cit.

The summary of poverty status in the 1970 census indicates that Illinois has relatively fewer families and individuals with incomes below the poverty level than does the nation as a whole. This again confirms that Illinois has higher overall income averages and that the distribution of incomes about these averages is not significantly different from income distributions nationwide.

The large size of the Illinois population means that in absolute numbers there is a significant incidence of poverty in the state. The 7.7 percent of Illinois families with incomes below the poverty level in 1970 include 214,000 such families made up of 807,000 persons. The 1970 census's total of 303,000 unrelated individuals below the poverty line must be added to poverty family members to realize the extent of poverty in the state in 1970.¹⁰ An estimated 167,000 poverty families, or 78.1 percent of the total families below the poverty line statewide, were urban residents. The 12,000 poverty families living on "rural farms" represented 10.2 percent of total Illinois farm families. Nationwide, the 1970 census showed that 15.8 percent of all rural farm families were below the poverty line.¹¹

PRODUCTS AND THE PRODUCTIVE PROCESS

The circular flow framework shows us that inputs generate outputs. By specification the dollar value of outputs in any year is equal to the dollar value of inputs, but the units of physical measurement are significantly different. Labor man-hours and capital investment are inputs; the

myriad of physical goods and services produced are outputs. While the essential characteristics of the Illinois labor force may approximate respective cross sections of the aggregate U.S., the nature and/or mix of the final products could be significantly different.

The basic measure of output at the national level is gross national product (GNP). The analogous measure for a state's economy is gross state product (GSP). Interest in estimates of gross state product is relatively new, and these data are not reported at the national level. Few states estimate their GSP, and the published estimates that are available may not be comparable in definition and methodology. In the absence of these data for other states, we cannot compare any differences between Illinois and the U.S. with the range of variation among the other states. We do have sufficient information, however, to make direct comparisons of the composition of Illinois product with that of the entire country.

Two detailed sources exist for estimates of Illinois's GSP. Since 1968 the Illinois Department of Business and Economic Development has prepared quarterly estimates of gross state product; the agency has also reconstructed annual state product data from 1960. Prior to 1971 the reporting by industrial division is highly aggregated, and more recent data still lack detailed industrial breakdowns.

In 1972 a detailed study of Illinois gross product and income accounts was published by researchers at Western Illinois University.¹² Although the methodology of this study differs somewhat from that of the Department of Business and Economic Development, the weights of the product

components appear compatible. Moreover, the alternative approach provides additional detail.

Gross National Product versus Illinois State Product

The mix of different goods and services produced in an economy can be classified in a variety of ways. One familiar method is to group output according to (1) goods and services produced for domestic consumption, (2) investment goods and services produced by the private sector, (3) government purchases of goods and services, and (4) goods or services produced for export outside the economy. Since some goods are imported from elsewhere for domestic use, frequently the "exports" figure is designated as the value of exports minus the value of imports. Thus this figure may be negative. Table 7 shows the major components of the Illinois and the U.S. gross products.

The exports of any state are relatively more important to that state's economy than is the export sector of the U.S. economy as a whole. The United States is a vast "common market" made up of fifty diverse states. Therefore, in relative terms, significantly more trade takes place among the states than between the aggregate U.S. and the rest of the world. Comparisons of GNP and GSP components should reflect this so-called foreign sector difference.¹³ Table 7 illustrates the overall major components of output for both Illinois and the U.S. without taking this difference into account. Illinois ships 78.7 percent of its state product to other states and to foreign countries. When component parts, material, and finished goods shipped into Illinois from elsewhere are subtracted,

Table 7

MAJOR COMPONENTS OF GROSS PRODUCT, 1967
(billions of dollars)

	Illinois		United States	
	Dollars	Percent GSP	Dollars	Percent GNP
Consumption expenditures (domestic)	28.1	55.5	492.1	61.9
Gross private investment	4.4	8.7	116.6	14.6
Government purchases of goods and services	4.5	8.8	180.1	22.6
Net exports (exports)	13.6 (47.0)	26.9	5.2 (46.2)	.6
(imports)	<u>(33.3)</u>		<u>(41.0)</u>	
Gross product	59.7	100.0	793.9	100.0

SOURCES: M. David Beveridge et al., "Gross Product and Income Accounts For Illinois: 1967," p. 8; U.S. President, Economic Report of the President, February 1975 (Washington: Government Printing Office, 1975), tables C-1, C-8.

the result is a net positive balance in external trade of 26.9 percent for the state. In 1967 exports overseas accounted for only 5.8 percent of national production; in that year the net balance of trade between the U.S. and the rest of the world was only 0.6 percent of GNP.

The importance of the U.S. common market is evident in the weight of Illinois net exports overseas and to other states. Even if one were to exclude shipments to other states, Illinois would continue to stand out

as a significant exporting state. A recent study estimates that in the value of product shipped overseas Illinois ranks first or second among the fifty states (depending on annual variations).¹⁴ Food products, nonmineral oils, and nonelectrical machinery are significant elements of total U.S. exports, and Illinois excels in each of these areas.

We can put other output components into better perspective by excluding all net trade across state lines and overseas from the Illinois production and all net balance of trade with the world from the United States production. The results are summarized in Table 8.

Table 8

RELATIVE WEIGHTS OF GROSS PRODUCT COMPONENT NET OF THE FOREIGN
TRADE SECTOR, ILLINOIS AND THE U.S., 1967.

	Illinois	U.S.
Consumption (gross product minus net exports)	76%	63%
Investment (gross product minus net exports)	12	15
Government sector (gross product minus net exports)	<u>12</u>	<u>22</u>
	100%	100%

Because recurring annual state product data in the classifications used in Table 8 are not available, an analysis of secular trends is precluded. The above estimates of gross private domestic investment will be of some concern within Illinois if the state continues to lag behind the U.S. as a whole. The differential investment trends suggest that future Illinois gross product will not expand as rapidly as that of

the nation. The resulting composition of state product could also be affected.

The many states that comprise the United States are at different stages in industrial growth. Illinois may be termed a "mature" state. Thus, the annual rate of private investment in Illinois may be less than that for the overall U.S., because less developed (agricultural) states are accelerating from much lower industrial bases. The absolute amount of Illinois's gross private investment, estimated at \$4.4 billion in 1967, remains substantial. Nevertheless, the observation that the rate of private investment in Illinois is less than that of the aggregate U.S. is cause for some concern that present parallels between the Illinois economic structure and that of the U.S. may be changing over time. Our lack of knowledge stems from the fact that only "still photographs" are available, not the entire moving picture over time.

Composition of Gross Product by Major Sectors

A second relevant way by which to compare the structure of Illinois's state product with that of the gross national product is to analyze the composition of gross product by major producing sectors. Table 9 illustrates the dollar valuation of U.S. gross national product by major sectors for recent select years. The dollar value of product by sectors for Illinois is presented in Table 10. The comparison of respective contributions by each sector to total gross product in Illinois and to the entire U.S. is shown in Table 11.

Table 9

GROSS NATIONAL PRODUCT BY INDUSTRY DIVISION, 1967-73
(billions of 1958 dollars)

	1967	1968	1969	1970	1971	1972	1973
Gross national product	\$675.2	\$706.6	\$725.6	\$722.5	\$746.3	\$792.5	\$839.2
Private nonfarm	584.5	613.2	629.9	626.3	648.3	694.3	737.6
Contract construction	23.1	23.8	24.1	23.6	24.0	25.7	25.7
Manufacturing							
Durable goods	123.9	131.8	136.9	125.1	127.1	141.6	159.7
Nondurable goods	81.4	87.4	91.7	92.4	96.0	103.8	112.7
Wholesale and retail trade	113.9	120.8	124.2	126.5	131.2	141.2	146.1
Finance, insurance, and real estate	91.6	95.2	95.5	96.4	101.0	105.2	108.3
Transportation, communica- tion, and utilities	66.5	70.9	75.4	77.4	80.1	85.3	90.1
Services	63.4	65.8	67.7	69.2	69.8	73.2	77.5
All other ¹	20.6	17.6	14.3	15.8	19.2	18.1	17.5
Government	65.5	68.6	70.3	70.0	70.3	70.8	72.7
Agriculture	25.2	24.8	25.4	26.2	27.7	27.4	28.9

¹Mining, rest of the world, and residual.

SOURCE: U.S. President, Economic Report of the President, January 1973 (Washington: Government Printing Office, 1973), Table C-5.

ILLINOIS GROSS STATE PRODUCT BY INDUSTRY DIVISION, 1967-74
(millions of current dollars)

	1967	1968	1969	1970	1971	1972	1973	1974 (preliminary)
Gross state product	\$50,957	\$54,285	\$58,011	\$59,975	\$63,278	\$67,983	\$75,950	\$81,501
Private nonfarm	45,349	48,422	51,619	53,050	55,808	59,964	65,684	70,530
Mining	362	365	371	409	370	454	495	541
Contract construction	2,431	2,724	3,028	3,075	3,379	3,351	3,534	3,715
Manufacturing	17,050	18,121	18,921	18,750	19,218	21,087	23,866	25,441
Durable goods	NA	NA	NA	NA	[11,698]	[13,164]	[15,201]	[16,274]
Nondurable goods	NA	NA	NA	NA	[7,520]	[7,923]	[8,665]	[9,167]
Wholesale and retail trade	8,630	9,354	9,985	10,429	11,078	11,722	12,526	13,466
Finance, insurance, and real estate	6,560	6,926	7,475	7,978	8,639	9,266	9,919	10,793
Transportation, communica- tion, and utilities	4,529	4,724	5,110	5,263	5,610	6,154	6,523	6,924
Transportation	NA	NA	NA	NA	[2,963]	[3,262]	[3,600]	[3,814]
Communication and utilities	NA	NA	NA	NA	[2,647]	[2,892]	[2,923]	[3,110]
Services and other	5,787	6,208	6,729	7,146	7,514	7,930	8,821	9,650
Government	4,130	4,574	4,969	5,568	5,898	6,297	6,778	7,294
Agriculture	1,478	1,289	1,423	1,357	1,572	1,722	3,488	3,678

NA: not available.

SOURCE: Illinois Department of Business and Economic Development.

PERCENTAGE COMPOSITION OF GROSS PRODUCT, SELECTED YEARS

	1967		1970		1973	
	Illinois	U.S.	Illinois	U.S.	Illinois	U.S.
Gross product	100.0	100.0	100.0	100.0	100.0	100.0
Private nonfarm	88.9	86.5	88.4	86.6	86.4	87.8
Contract construction	4.7	3.4	5.1	3.2	4.6	3.0
Manufacturing	33.4	30.3	31.2	30.0	31.4	32.4
Durable	NA	18.3	NA	17.3	20.0	19.0
Nondurable	NA	12.0	NA	12.7	11.4	13.4
Wholesale and retail trade	16.9	16.8	17.3	17.5	16.4	17.4
Finance, insurance, and real estate	12.8	13.5	13.3	13.3	13.0	12.9
Transportation, communication, and utilities	8.8	9.8	8.7	10.7	8.5	10.7
Services and other	12.0	12.3	12.5	11.6	12.2	11.2
Services	NA	9.3	NA	9.5	NA	9.2
Other	NA	3.0	NA	2.1	NA	2.0
Mining	0.7	0.4	0.6	0.5	0.6	0.5
Government	8.1	9.7	9.2	9.6	8.9	8.6
Agriculture	2.9	3.7	2.2	3.6	4.5	3.4

NA: not available.

SOURCES: Tables 9 and 10 above.

The close similarity of the percentage composition of gross product by basic sector between Illinois and the U.S., illustrated on Table 11, mirrors the similarities in distribution of respective labor forces by industry shown by Table 5. The relative weights of contributions by each sector to the overall Illinois economy are comparable to the U.S. at-large. The annual variation in total valuation of Illinois agriculture is largely a result of the fact that 85.1 percent of the state's agricultural production is concentrated in corn, soybeans, and hog production. Variable annual weather conditions and vacillating world prices will have a greater impact on the Illinois agricultural product than on the more diverse U.S. agricultural sector.

The issue of whether the economy of Illinois is a microcosm of that of the U.S. has a number of diverse and complex facets, but each element adds to the total picture. Table 11, illustrating the percentage composition of gross product for selected years, is a critical summary table.¹⁵ When the basic components of gross product are compared, the similar relative weights of each sector are apparent.

Comparisons within the Manufacturing Sector

Manufacturing is the single most important productive sector both for Illinois and the U.S. In 1973 manufacturing accounted for 31.4 percent of Illinois state product and 32.4 percent of GNP. When manufacturing product is further broken down into durable and nondurable goods, durable goods account for 63.7 percent of Illinois manufacturing production and 59.0 percent of the value of U.S. manufacturing production.

As with the fine detailing of the employment of the Illinois labor force by industry, our premise in looking at production data by specific industry was that general similarities between the Illinois and U.S. economies would not hold when the manufacturing production data by specific industry was disaggregated further. The comparisons of value-added by specific industry in Table 12 would seem to show our skepticism again to be unfounded, though we leave the final judgment to the reader. The relative contributions by thirteen of the eighteen manufacturing industries with available data are comparable between Illinois and the entire U.S.¹⁶

Five manufacturing industries do deviate significantly in their relative contributions to state and national manufacturing: lumber and wood products; transportation equipment; textile mill products; apparel, other textile products; and machinery, except electrical. Each of these manufacturing industries has components, and the details of the breakdown of these industries in Illinois provides some information about the state's deviation from the national composition of manufacturing industries.

The lumber and wood products industry is extremely small in Illinois. A state of rich farmland, Illinois has few forests. The few national forests in Illinois are concentrated in the extreme southern part of the state, in counties with poor farming soil. The sawmills and planing mills component of the lumber and wood products industry accounts for 35.9 percent of lumber and wood products value-added nationwide, but

Table 12

THE MANUFACTURING SECTOR:
VALUE-ADDED BY INDUSTRY GROUP, 1972
(millions of dollars)

	Illinois		U.S.	
	Dollars	Percent of Total Value- Added	Dollars	Percent of Total Value- Added
All industries	25,863.7		352,831	
Food and kindred products	3,128.3	12.1	35,332	10.1
Tobacco products	*		2,630	
Textile mill products	67.3	.3	11,558	3.3
Apparel and other textile products	334.4	1.3	13,227	3.8
Lumber and wood products	176.1	.7	10,101	2.9
Furniture and fixtures	374.7	1.5	6,138	1.7
Paper and allied products	718.7	2.8	12,930	3.7
Printing and publishing	2,216.4	8.7	20,058	5.7
Chemical and allied products	2,103.1	8.3	32,388	9.3
Petroleum and coal products	409.8	1.6	5,801	1.6
Rubber and miscellaneous plastic products	683.0	2.7	12,023	3.4
Leather and leather products	*		2,871	
Stone, clay, and glass products	776.4	3.1	12,563	3.6
Primary metal products	1,936.1	7.6	23,190	6.6
Fabricated metal products	2,521.3	9.9	26,930	7.7
Machinery, except electrical	4,216.4	16.6	37,497	10.7
Electric and electronic equipment	3,082.4	12.1	30,299	8.7
Transportation equipment	1,243.4	4.9	40,146	11.5
Instruments and related products	859.5	3.4	10,452	3.0
Miscellaneous manufacturing industries	545.9	2.1	6,697	1.9

* Withheld to avoid disclosing figures for individual companies.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Manufactures: 1972; Volume 1, Summary and Subject Statistics, MC72(1), 1975 and Area Series, MC72(3)-14. Illinois. (Washington: Government Printing Office, February 1975). See especially Table 5.

only 9.8 percent value-added in Illinois. The logging camp and logging contractor element represents only 1.2 percent of Illinois lumber and wood products, but 14.0 percent nationwide. Illinois has a disproportionate concentration in the other millwork and wooden containers component. Thus, not only is the lumber and wood products industry relatively much smaller in Illinois, but the mix of this industry is significantly different from that which exists nationwide.

Three other Illinois manufacturing industries are less important to statewide manufacturing than the relative weights of these industries nationwide. The transportation equipment industry represents 11.5 percent of manufacturing value-added nationwide, but only 4.9 percent of Illinois manufacturing value-added. A further analysis of the components of this industry shows that Illinois produces proportionately less than the U.S. as a whole in manufacturing value-added in three principal groups: motor vehicles and equipment; aircraft and parts; and ship and boat building. The comparative figures are presented in Table 13. The balance of the miscellaneous transportation equipment for Illinois is located in motorcycles, bicycles, and parts; trailer coaches; and miscellaneous transportation equipment. Although each of these categories is more important to the Illinois transportation equipment industry than to that of the U.S., these categories are not large in employment or in value-added. They are not presented separately in Table 13.

The third and fourth manufacturing industries that contribute proportionately less to Illinois than to the national economy are the textile mill products industry and the apparel, other textile products,

industry. These are two instances of regional specialization. Although historically New England was the dominant region for textile manufacturers, in recent decades these industries have shifted to the south-Atlantic and south-central regions. There is some representation of textiles in Illinois, but Illinois is simply not a textile state.

Table 13

RELATIVE CONTRIBUTIONS OF SELECTED TRANSPORTATION EQUIPMENT
INDUSTRY CATEGORIES TO VALUE-ADDED, ILLINOIS AND U.S., 1972.

Transportation Equipment Category	Percent of Transportation Equipment Value-Added		Percent of Total Manufacturing Value-Added	
	Illinois	U.S.	Illinois	U.S.
Motor vehicles and equipment	49.2	48.5	2.4	5.6
Aircraft and parts	10.8	40.2	0.5	4.6
Ship and boat building	0.3	6.1	0*	0.6
Railroad equipment	6.4	2.8	0.3	0.4
Miscellaneous transportation equipment	<u>33.3</u>	<u>2.4</u>	<u>1.7</u>	<u>0.3</u>
	100.0	100.0	4.9	11.5

*less than 0.1 percent

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Manufactures: 1972; Volume 1; Summary and Subject Statistics, loc. cit.

Machinery, except electrical, is the fifth Illinois manufacturing industry that contributes to statewide manufacturing disproportionate to its national weight. This industry is relatively more important to total Illinois manufacturing than to the aggregate of all such production nationwide. This one industry offsets much of the relatively smaller contributions of the four industries discussed above, and the importance of all manufacturing in Illinois is comparable to the relative importance of manufacturing to total U.S. production.

In Illinois the concentrations of farm machinery manufacturers and construction machinery manufacturers as components of the machinery, except electrical, industry contribute to the industry's greater importance in Illinois than in the U.S. at-large. Farm machinery manufacturers in Illinois account for 15.0 percent of the industry's statewide output and 2.6 percent of total state manufacturing value-added. Nationwide, farm machinery accounts for only 7.4 percent of machinery, except electrical, and only 0.8 percent of U.S. manufacturing value-added.

Illinois is also relatively important in the production of construction and related machinery, another component of machinery, except electrical. Construction and related machinery accounts for 30.0 percent of the industry value-added statewide and represents 5.1 percent of total Illinois manufacturing value-added. The comparable U.S. figures for this component of machinery, except electrical, are 14.8 percent and 1.6 percent.

One other component of the machinery, except electrical, industry deserves mention: office and computing machinery. This component is not as important to Illinois as it is nationwide. Thereby it offsets to a

degree the concentration of farm machinery and construction machinery manufacturing in Illinois. Office and computing machinery accounts for 4.4 percent of Illinois machinery, except electrical, value-added, compared with 12.0 percent nationwide. This component notwithstanding, the machinery, except electrical, industry in Illinois contributes 16.6 percent of statewide manufacturing value-added. The contribution of this component at the national level is 10.7 percent.

When one considers the complexities of the twenty representative industries that comprise the important manufacturing sector, it is significant that in Illinois this sector is so balanced as to parallel U.S. manufacturing in many respects. The total manufacturing sector in Illinois contributes to state product in almost the same weight as does this sector contribute to the nationwide product. Thirteen of twenty industrial categories have comparable weights between Illinois and the U.S. When considered together, the five manufacturing industries that do differ in their relative contributions to total production balance out their relative differences.

Agriculture

In analyzing the distribution of the labor force by occupation, we noted that in 1970 1.8 percent of the Illinois labor force were farmers and farm managers, comparable to 1.9 percent for the total U.S. civilian labor force. When all individuals employed in agriculture are taken into account, 2.7 percent of the Illinois labor force is employed in this sector. The U.S. is higher, at 3.7 percent, because Illinois has proportionately fewer farm laborers. This reflects the concentration of family

farms and sharecropping, as noted above. The nature of crop specialization also contributes to the need for fewer farm laborers in Illinois. The deep, fertile soil of northern and central Illinois, coupled with relatively flat prairie lands, invites capital-intensive modes of mechanized farming. Huge, expensive tractors and combines efficiently perform the numerous agricultural operations involved in plowing, preparation, planting, fertilization, harvesting, sorting, and grading. When one looks at the other states, the relative proportions of agricultural employment to total statewide employment vary significantly from 0.9 percent to a high of 22.2 percent. Therefore the weight of agriculture in overall Illinois employment is close to that in the U.S. as a whole.

Agriculture is the one sector in the Illinois economy where detailed investigation discloses differences in structure that may be disguised in aggregate data. The Illinois agricultural sector has two features that distinguish the relative weight of this activity in total state product from that in the U.S. at-large: relative stability and internal composition. The ten-year average of agriculture to total product is approximately 3.5 percent both for Illinois and the entire U.S. But the relative contribution of Illinois agriculture to total state product has an annual variation that is significantly greater than that of the U.S. Over the last ten years, the range was from 2.0 to 4.5 percent of the Illinois state product. The primary reason, as we have noted, is the concentration of Illinois agriculture in corn, soybeans, and hogs. Variations in hog prices and in annual crop yields and attendant bushel prices of corn and soybeans will determine the total contribution of

Table 14

VALUE OF SPECIFIC CROPS
AS PERCENTAGE OF TOTAL AGRICULTURAL PRODUCT, 1973
(millions of dollars)

Crop or Agricultural Activity	Illinois		U.S.	
	Output	Percent Total Output	Output	Percent Total Output
Wheat	\$ 111,510	1.8	\$ 6,500,728	7.1
Rye	670		46,627	0.1
Rice, rough			1,312,418	1.4
Corn	2,440,225	40.3	13,374,517	14.6
Oats	2,077		722,057	0.8
Barley	833		853,462	1.0
Sorghum grain	9,104	0.2	1,994,930	2.2
Cotton			2,795,153	3.1
Sugar beets			441,720	0.5
Sugar cane			255,095	0.3
Maple syrup			8,018	
Honey	1,275		105,767	0.1
Beeswax	38		3,144	
Tobacco			1,565,309	1.7
Cottonseed			495,915	0.5
Flaxseed			126,692	0.1
Peanuts			558,312	0.6
Soybeans	1,671,784	27.6	8,849,282	9.7
Vegetables, ¹ commercial ¹	25,792	0.4	2,387,043	2.6
Peas			58,624	0.1
Potatoes	753		1,196,620	1.3
Sweet potatoes			89,284	0.1
Apples	747		544,333	0.6
Other fruits	979		2,295,426	2.1
Nuts			402,785	0.4
Flowers	2,512		227,634	0.2
Hay	9,753	0.2	4,878,870	5.3
Beans, dried			438,185	0.5
Peas, dry edible			32,613	
Miscellaneous crops	1,249		92,852	
Cattle and calves	468,974	7.7	18,268,259	20.0
Hogs	1,038,900	17.2	7,731,957	8.5
Other animals	13,538	4.4	1,538,013	1.6
Farm dairy products	191,587	3.2	8,316,252	9.1
Eggs	61,013	1.0	2,911,435	3.2
Total agricultural output	\$6,053,313	100.0	\$91,419,331	100.0

¹Vegetables, commercial, include artichokes, asparagus, snap beans, broccoli, brussels sprouts, cabbage, cantalopes, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, escarole, garlic, honeydew melons, lettuce, onions, green peppers, spinach, tomatoes, and watermelons.

SOURCE: U.S. Department of Agriculture, Agriculture Statistics, 1974 (Washington: Government Printing Office, 1974).

Illinois agriculture in any specific year.

The relative contributions of various crops and agricultural activities are presented in Table 14. Corn production, at 40.3 percent, soybeans, at 27.6 percent, and hog raising, at 17.2 percent of total agricultural output, together account for 85.1 percent of Illinois's agriculture. In most states agricultural production is specialized, but nationwide this sector is quite diverse. Certainly the composition of Illinois agricultural output does not reflect the aggregate U.S. agriculture sector. Only in the total effort devoted to agriculture compared with manufacturing, transportation, and other industries is Illinois comparable to the U.S.

Conclusion

We conclude as we began, with the analogy of looking down on the prairies and cities of Illinois from an airplane flying over the state. We note many general characteristics that are immediately familiar because they mirror certain stereotypes about the United States. We would also anticipate that the closer we come to the ground, the more specific and differentiated the details of the landscape would become.

We were surprised to find that some striking similarities between the economies of Illinois and the nation as a whole were actually reinforced when we analyzed details of specific industries. Many of the social characteristics of the Illinois population, such as education and race, parallel those of the U.S. The distribution of the labor force by occupation illustrates the representative nature of the Illinois civilian

labor force. The close proximity between the general occupational distributions of Illinois and the overall U.S. is made more striking when the wide range of relative weights for these occupations among the fifty states is considered. Even when one turns to a more detailed analysis of labor force distribution by thirty major industrial classifications, the parallels between Illinois's labor force employment and that of the U.S. remain generally close. This comparison of employment by industry classification is one illustration that the relative weights of the major Illinois industries are comparable to those of the U.S.

Because the distribution of the Illinois labor force among industries follows the national pattern, the structure of output should also be somewhat comparable. The composition of gross product for selected years confirms this relationship. The relative weights of construction, manufacturing, wholesale and retail trade, finance, and government are comparable between Illinois and the aggregate U.S. The transportation-communication-utilities sector is relatively more important for the U.S. than for Illinois as a state, and agriculture in turn is somewhat more significant for Illinois. Agriculture in Illinois is a specialized industry, and therefore this sector is more volatile on a year-to-year basis than is aggregate U.S. agriculture. However, Illinois's productive output as a whole reflects the relative composition of gross national product.

The diverse Illinois economy is further shown by the relative weights attributed to each of twenty manufacturing industries. Although

manufacturing is but one of eight major sectors, the structure of manufacturing is pivotal to a comparison of the overall economies of the state and the nation. All manufacturing industries have some representation in Illinois, and in the majority of industries the relative weights are comparable.

In the final analysis, one must apply one's own judgment in deciding whether Illinois is a microcosm of the U.S. At the outset we stated that no state's economy could be the mirror image of the aggregate U.S. economy. Many factors--geography, natural resources, cultural and historical differences--make each state unique. Yet we were not prepared for the striking parallels we found in labor force occupations, gross product composition, and manufacturing sector output. The Illinois economy--if not a precise microcosm of the U.S. economy--certainly has several significant similarities in structure and diversity with that of the country as a whole.

FOOTNOTES

1. Clearly the economic, social, and political factors of a complex society are interrelated. This analysis of the Illinois economy is sufficiently ambitious, however, that we choose to concentrate on economic variables.
2. We shall use the economic term "value-added" frequently in this paper. Value-added is an important measure of economic activity. A farm tractor assembled in Illinois has a specified market value (selling price). However, not all of that total value is the result of production in Illinois. The tires may have been shipped from Ohio, the gearbox from Indiana, the battery from Wisconsin, and so on. In a nontechnical sense, the value-added in production by any specific business enterprise or plant is the market value of that plant's product minus the cost of materials, component parts, and supplies purchased from others. In the open economy of Illinois, much of the value is embodied in components manufactured within the state which are shipped to final assembly plants located out of state, and vice versa.
3. We chose "range" as a less complicated measure of dispersion than other, more technical measures such as standard deviation, variance, or interquartile range.
4. The unemployment rate does vary among labor market areas in the state. The Quad Cities, at 6.0 percent, and Rockford, at 6.1 percent, were above the 1971 U.S. average.
5. U.S. Department of Labor, Monthly Labor Review 98 (October 1975), "Current Labor Statistics," Table 2.
6. Illinois Bureau of Employment Security (Chicago), Submission Report to federal government for FY 1975.
7. Chicago Sun-Times, November 8, 1975. Data were announced by the U.S. Department of Labor and the Illinois Bureau of Employment Security.
8. U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business 55 (August 1975), Table 2.
9. One statistical measure of the relative inequality of income distribution is termed the gini coefficient. The smaller the gini coefficient, the more equally is income distributed. The 1970 census data produced a gini coefficient of .4252 for the entire U.S. and a comparable .4462 for Illinois.

10. U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; Detailed Characteristics, Final Report PC(1)-D15 (Illinois) (Washington: Government Printing Office, October 1972), Table 207.
11. U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970; General Social and Economic Characteristics, Final Report PC(1)-C1 (United States), Summary. (Washington: Government Printing Office, June 1972), Table 95.
12. M. David Beveridge, Richard E. Hattwick, and Michael T. Pledge, "Gross Product and Income Accounts for Illinois: 1967" (Macomb: Center for Business and Economic Research, Western Illinois University, December 1972).
13. The reference to the products of other states as "foreign" to the product of Illinois may seem awkward. Nonetheless, this term is strictly correct when one is discussing state product. Occasionally the term "external sector" is used instead.
14. Diane L. Gottheil, "How Illinois, an Inland State, Promotes Global Export Business," Illinois Issues 1 (July 1975): 210-13.
15. The years 1967 and 1970 both were mini-recession years, while 1973 was a year of moderate expansion. The three years in Table 11 were selected on the basis of available final data, and the presence of recession forces does not seem to distort the comparisons of gross product.
16. The U.S. Bureau of the Census does not publish Illinois data for the tobacco products industry and the leather products industry. There are so few companies engaged in these industries in Illinois that publication of production and profits statistics would disclose confidential information.

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